TEST REPORT ON BITUMEN

Lab ID	:	CP-2017-04-12-03 **Date: 15-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer's Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied By Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	12-04-17
Sample ID No	:	2017-04-12-03/01
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-1220(1978) (Reaffirmed-2004)
Date of test	:	13-04-17

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	68	60 to 70
2	Softening Point, °C	49.8	Min. 40°C
3	Ductility, cm	98	Min. 75cm
4	Flash point, °C	221.5	Min. 220°C
	Fire point, °C	256	

Note:
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared by
Harshitha

AE-03

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL|
GEO TECHNICAL| PROJECT MANAGEMENT| SURVEYING SERVICES|

TEST RESULTS OF GRADATION FOR GSB
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	CP-RW-2017-04-01-01 **Date: 03-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	01-04-17
Sample ID No	:	2017-04-01-01/01
Type of Mix	:	GSB (Granular Sub Base)
Date of test	:	01-04-17
Oven Dry Weight(gm)	:	10000

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Spec. Limit Vide Table 400.1 MORTH Specification
75	0	0	0	100	100
53	255	255	2.55	97.45	80-100
26.5	2437	2692	26.92	73.08	55-90
9.5	1871	4563	45.63	54.37	35-65
4.75	2187	6750	67.50	32.50	25-55
2.36	1054	7804	78.04	21.96	20-40
0.425	976	8780	87.80	12.20	10-25
0.075	819	9599	95.99	4.01	0-5

TESTS ON FILLER SCREEN MATERIALS

Sl no	Particulars	Test results	Spec.Limit Vide Table 400.2 MORTH Specification
1	Liquid Limit, %	23.10%	Maximum 25
2	Plasticity index, %	Non plastic	Maximum 6

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE-03

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro
R. CARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2017-04-04-01** **Date: 06-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	04-04-17
Sample ID No	:	2017-04-04-01/01
Type of Mix	:	WMM (Wet Mix Macadam)
Date of test	:	04-04-17
Oven Dry Weight(gm)	:	11000

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0	100	100
45	298	298	2.71	97.3	95-100
22.4	2165	2463	22.39	77.6	60-80
11.2	2201	4664	42.40	57.6	40-60
4.75	2587	7251	65.92	34.1	25-40
2.36	1854	9105	82.77	17.2	15-30
0.6	525	9630	87.55	12.5	8-22
0.075	1187	10817	98.34	1.7	0-5

Note:-

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE-03

CIVIL PRO BANGALORE Sig..... Date.....

FOR CIVIL Pro.
KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2017-04-07-01** **Date: 08-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	07-04-17
Sample ID No	:	2017-04-07-01/01
Type of Mix	:	WMM (Wet Mix Macadam)
Date of test	:	07-04-17
Oven Dry Weight(gm)	:	10000

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0	100	100
45	261	261	2.61	97.4	95-100
22.4	2277	2538	25.38	74.6	60-80
11.2	2231	4769	47.69	52.3	40-60
4.75	2376	7145	71.45	28.6	25-40
2.36	1055	8200	82.00	18.0	15-30
0.6	491	8691	86.91	13.1	8-22
0.075	1042	9733	97.33	2.7	0-5

Note:-

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE-03

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2017-04-10-01** **Date: 12-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	10-04-17
Sample ID No	:	2017-04-10-01/01
Type of Mix	:	WMM (Wet Mix Macadam)
Date of test	:	10-04-17
Oven Dry Weight(gm)	:	10000

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0	100	100
45	261	261	2.61	97.4	95-100
22.4	2277	2538	25.38	74.6	60-80
11.2	2231	4769	47.69	52.3	40-60
4.75	2376	7145	71.45	28.6	25-40
2.36	1055	8200	82.00	18.0	15-30
0.6	491	8691	86.91	13.1	8-22
0.075	1042	9733	97.33	2.7	0-5

Note:-

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE-03

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
B.KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST REPORT OF AGGEGRATE IMPACT VALUE
IS: 2386 Part IV

Lab ID	:	**CP-RW-2017-04-04-01** **Date: 06-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	04-04-17
Sample ID No	:	2017-04-04-01/01
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	04-04-17

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	312.6	312.1
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	67.9	70.5
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	244.4	240.7
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.3	0.9
5	Aggregate impact value	(B/A)*100	21.7	22.6
6	Aggregate impact value (Mean of two tests)	Pecentage	22.2	

Note:-
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL|
GEO TECHNICAL| PROJECT MANAGEMENT| SURVEYING SERVICES |

DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2017-04-04-01** **Date: 06-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	04-04-17
Sample ID No	:	2017-04-04-01/01
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	04-04-17

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.1%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	10.6%	
Combined Flakiness and Elongation Index for WMM	22.7%	

Note:-
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE-07

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2017-04-07-01** **Date: 08-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	07-04-17
Sample ID No	:	2017-04-07-01/01
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	07-04-17

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	11.6%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	13.1%	
Combined Flakiness and Elongation Index for WMM	24.7%	

Note:-
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE 02

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2017-04-12-01** **Date: 15-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/140/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	12-04-17
Sample ID No	:	2017-04-12-01/01
Type of Mix	:	DBM-Plant (Dense Bituminous Macadam)
Date of test	:	12-04-17
Weight of Sample(gm)	:	5000

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	95	95	1.90	98.1	90-100
19	454	549	10.98	89.0	71-95
13.2	545	1094	21.88	78.1	56-80
4.75	1354	2448	48.96	51.0	38-54
2.36	1068	3516	70.32	29.7	28-42
0.3	986	4502	90.04	10.0	7-21
0.075	165	4667	93.34	6.7	2-8
PAN	333	5000	0.00	0	0

Note:-
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AE W3

Prepared By:
Harshitha

AE 07

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

TESTS RESULTS ON AGGREGATE IMPACT VALUE
(IS:2386 Part IV)

Lab ID : **CP-RW-2017-04-12-01** **Date: 15-04-17**

Customer : Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Sub Division, BBMP, Bangalore.

Project Name : Asphalting to Roads and improvements to drains in Akshayanagra 1st Main and cross roads of Attur Ward No.03

Agency : Technical Manager(West), KRIDL, BBMP, Bangalore.

Customer Reference : BBMP/EE(YNK.D)/W.O/140/2017-18

Source of Sample : Sample supplied by the Agency

Sample Condition : Satisfactory

Date of Receipt : 12-04-17

Sample ID No : 2017-04-12-01/01

Type of Mix : Coarse Aggregate for DBM(Dense Bituminous Macadam)

Date of test : 13-04-17

SLNo	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	305.8	305.3
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	65.2	60.1
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	240.1	244.7
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.5	0.5
5	Aggregate impct value	(B/A)*100	21.32	19.69
6	Aggregate impct value (Mean of two tests)		20.50	

Note:-

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

AEW3

Prepared By:
Harshitha

AE-O

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL|
GEO TECHNICAL| PROJECT MANAGEMENT| SURVEYING SERVICES|